

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/002215

## A. CLASSIFICATION OF SUBJECT MATTER

IPC<sup>7</sup>: F03D-3/00, F03D-11/00

## B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC<sup>7</sup>: F03D

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic database(s) consulted during the international search (name of database(s) and, where practicable, search terms used)

WEST, Delphion, Esp@cenet (wind, turbine, windmill, scroll, velocity, venturi, vertical axis, spiral, vortex, curve)

## C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category*	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No(s).
X	US 4127356 A (MURPHY, R. D.) 28 November 1978 (28-11-1978) * Fig. 3; col. 2, line 46 - col. 3, line 10 *	1-2, 4-5
X	US 4070131 A (YEN, J. T.) 24 January 1978 (24-01-1978) * Abstract; Fig. 3; col. 6, lines 9 - 39 *	1-2, 4-5
X	US 4140433 A (ECKEL, O. C.) 20 February 1979 (20-02-1979) * Figs 1 & 3; col. 2, line 47 - col. 12, line 2 *	1-3
A	US 5852331 A (GIORGINI R.) 22 December 1998 (22-12-1998) * Figs 2-4; col. 2, lines 6-24; col. 3, lines 3-30 *	1-5
A	US 4309146 A (HEIN ET AL.) 05 January 1982 (05-01-1982) * Abstract; Figs 3, 5; col. 2, line 56 - col. 4, line 23 *	1-5

☐ Further documents are listed in the continuation of Box C.

☒ See patent family annex.

* Special categories of cited documents :	"T" later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the invention
"A" document defining the general state of the art which is not considered to be of particular relevance	"X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to involve an inventive step when the document is taken alone
"E" earlier application or patent but published on or after the international filing date	"Y" document of particular relevance; the claimed invention cannot be considered to involve an inventive step when the document is combined with one or more other such documents, such combination being obvious to a person skilled in the art
"L" document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another citation or other special reason (as specified)	"&" document member of the same patent family
"O" document referring to an oral disclosure, use, exhibition or other means	
"P" document published prior to the international filing date but later than the priority date claimed	

Date of the actual completion of the international search

21 March 2005 (21-03-2005)

Date of mailing of the international search report

31 March 2005 (31-03-2005)

Name and mailing address of the ISA/CA  
Canadian Intellectual Property Office  
Place du Portage I, C114 - 1st Floor, Box PCT  
50 Victoria Street  
Gatineau, Quebec K1A 0C9  
Facsimile No.: 001(819)953-2476

Authorized officer

Valérie Dubé (819) 934-4261

# INTERNATIONAL SEARCH REPORT

International application No.  
PCT/CA2004/002215

## Box No. II Observations where certain claims were found unsearchable (Continuation of item 2 of the first sheet)

This international search report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons :

1. ☐ Claim Nos. :  
because they relate to subject matter not required to be searched by this Authority, namely :
  
2. ☒ Claim Nos. : 6-9  
because they relate to parts of the international application that do not comply with the prescribed requirements to such an extent that no meaningful international search can be carried out, specifically :  
  
It appears that all of the claims on file are drafted as independent claims. Claims 6 to 9 could not be searched because no feature can be found in aforesaid claims as they are directed to a desired result only, without defining any physical properties or configuration required for obtaining such a result.
3. ☐ Claim Nos. :  
because they are dependant claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

## Box No. III Observations where unity of invention is lacking (Continuation of item 3 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows :

1. ☐ As all required additional search fees were timely paid by the applicant, this international search report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this international search report covers only those claims for which fees were paid, specifically claim Nos. :
4. ☐ No required additional search fees were timely paid by the applicant. Consequently, this international search report is restricted to the invention first mentioned in the claims; it is covered by claim Nos. :

Remark on Protest ☐ The additional search fees were accompanied by the applicant's protest.

☐ No protest accompanied the payment of additional search fees.

# INTERNATIONAL SEARCH REPORT

Information on patent family members

International application No.  
PCT/CA2004/002215

Patent Document Cited in Search Report	Publication Date	Patent Family Member(s)	Publication Date
US 4127356 A	28-11-1978	NONE	
US 4070131 A	24-01-1978	NONE	
US 4140433 A	20-02-1979	AU1487476 A CA1109800 A1 CH625018 A5 DE2629923 A1 FR2317522 A1 GB1539566 A JP52009742 A NL7606399 A	15-12-1977 29-09-1981 31-08-1981 27-01-1977 04-02-1977 31-01-1979 25-01-1977 12-01-1977
US 5852331 A	22-12-1998	NONE	
US 4309146 A	05-01-1982	NONE	